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How You See Yourself When Your Body Image Doesn't Measure Up

Do you like what you see when you look in the mirror? If your answer is "No," you're not alone. For many of us, there's a growing gap between how our bodies look and how we'd like them to look.

Americans have generally gotten wider and flabbier over the past few decades, as obesity rates continue to climb. But at the same time, the media bombard us with images of people who seem impossibly thin or muscular. The gap between reality and expectations can leave many people feeling inadequate.

It's normal to look in the mirror occasionally and wish for a firmer body or more glamorous hair. But some people find they can't stop thinking about body flaws they believe they have. They may avoid going out with friends or even stop going to work because they feel ashamed of their skin, hair, weight or other features.

"They say they look ugly, flawed or deformed, but in reality they look fine," says Dr. Katharine A. Phillips, a psychiatrist at Brown University. "The physical flaws they perceive are things we can't see at all, or they're really quite minimal."

Having a negative **body image** like this isn't just an attitude problem. It can take a toll on your mental and physical health. If excessive thoughts about your body cause great distress or interfere with your daily life, you may have a body image disorder, also known as body dysmorphic disorder (BDD).

BDD is a psychiatric condition that affects about 1-2% of the population. It occurs slightly more often in

women than in men. "People with BDD frequently think about an imagined defect in their physical appearance. The thoughts are difficult to resist or control," Phillips says.

"On average, these patients report that they think about their perceived appearance flaws for about 3–8 hours a day."

Because of their imagined flaws, many people with BDD avoid going out in public or shun friends and family. About three-quarters have had major depression, and about 1 in 4 attempt suicide.

Much attention has been paid to how culture and the media can damage women's feelings about their own bodies. But studies suggest that men and boys can also feel they can't measure up to the broad-shouldered, narrow-waisted, muscular men they see in ads, cartoons, TV shows, movies and even action figures.

"There's a climate in American society that rewards muscularity



and equates it with masculinity," says Dr. Harrison Pope, a psychiatrist at Harvard Medical School.

Pope and his colleagues have found a wide gap between what men think of their own bodies and what they believe women prefer. In one study, researchers asked men in the U.S. and Europe to select a body size and shape on a computer that

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Definitions

Body Image

What you think about your own body's size, shape and features.

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they felt matched their own bodies. Then they selected a body that they thought women would find most attractive. On average, the men expected that women would prefer bodies with about 20 pounds more muscle than the men actually had.

But when the scientists asked women which body shapes they liked most, "the women chose perfectly ordinary male bodies, without any extra muscle," Pope says. "The men seemed to have a very distorted view of what women wanted."

A skewed view of how muscular you are may signal a type of BDD called muscle dysmorphia. It's sometimes found among bodybuilders. People with the disorder become obsessed with being more muscular. "They might look in a mirror and think that they look small and wimpy, even if they are actually large and muscular," Pope says. Their poor body image puts them at risk for illegal use of **anabolic steroids** and other drugs to gain muscle mass.

"Steroids are extremely effective at building muscle, and they aren't as negatively perceived as other drugs of abuse," Pope says. "They can give you bulging upper-body muscles

that you could never achieve with even the most dedicated exercise and weight-training."

But these drug-induced muscles come at a high price. Steroid abuse can lead to serious, sometimes irreversible health problems. It can damage the liver and cause high blood pressure, high cholesterol and skin problems. Growing evidence suggests that steroids can also damage heart muscle. Males may develop breast tissue, and their testicles may shrink. Steroid abuse can also alter certain brain chemicals and affect mood and behavior.

"One surprising effect is that when men take anabolic steroids and



Web Links

For links to more information about body image, see this story online:
<http://newsinhealth.nih.gov/2009/July/feature1.htm>

gradually become more muscular, they sometimes become more fixated on their body size and even more dissatisfied," Pope says. "Steroids don't always relieve body image problems."

People with BDD, however, might focus on any part of the body. The most common concern is with some aspect of the skin (such as perceived acne or scarring), which occurs in about three-fourths of patients with BDD. Many patients are fixated on their hair or nose. Some worry about their weight, thighs, teeth or face. More than one-third seek cosmetic surgery, although it rarely fixes the appearance problem they believe they have.

BDD can be difficult to diagnose, because affected people look normal and are often too ashamed to talk about their concerns with appearance. Clues include frequent mirror-checking, excessive grooming, skin picking or covering up disliked body parts.

"The good news is that we're learning a lot about effective treatment for this disorder," says Phillips. A number of studies suggest that medications known as serotonin-reuptake inhibitors, which are used to treat depression and certain other disorders, can be effective for BDD. A type of therapy known as cognitive-behavioral therapy also seems promising.

If you don't have a body image disorder, improving your attitude about your body might just be a matter of accepting that healthy bodies come in many shapes and sizes. We all want to look good, but you should never sacrifice your health to try to achieve a "perfect" body. ■



Wise Choices For a Healthy Body Image

You can improve your attitude about your body by making healthy lifestyle choices.

- Eat wholesome foods to promote healthy skin and hair, as well as strong bones.
- Exercise regularly to improve your health and boost your self-esteem and energy.
- Move and enjoy your body. Go walking, swimming, biking and dancing.
- Get plenty of rest to help manage stress and reduce anxiety.



Definitions

Anabolic Steroids

Compounds, like the male sex hormone testosterone, that help to build muscle.

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National Institutes of Health

Office of Communications
& Public Liaison
Building 31, Room 5B64
Bethesda, MD 20892-2094
nihealthnews@od.nih.gov
Tel: 301-435-7489 Fax: 301-496-0019

Editor Harrison Wein, Ph.D.

Assistant Editor Vicki Contie

Contributors Vicki Contie, Bryan Ewsichuk (design), Margaret Georgiann (illustrations) and Harrison Wein

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Don't Dry Out

Make Sure You Drink Enough Water

You may wonder if you've been drinking enough water, especially when it's hot out. There's a lot of confusing advice out there about how much you really need. The truth is that most healthy bodies are very good at regulating water. Elderly people, young children and some special cases—like people taking certain medications—need to be a little more careful. Here's what you need to know.

"Water is involved in all body processes," says Dr. Jack M. Guralnik of NIH's National Institute on Aging. "You need the proper amount for all those processes to work correctly."

The body regulates how much water it keeps so it can maintain levels of the various minerals it needs to work properly. But every time you breathe out, sweat, urinate

or have a bowel movement, you lose some fluid. When you lose fluid, your blood can become more concentrated. Healthy people compensate by releasing stores of water, mostly from muscles. And, of course, you get thirsty. That's your body's way of telling you it needs more water.

At a certain point, however, if you lose enough water, your body can't compensate. Eventually, you can become dehydrated, meaning that your body doesn't have enough fluid to work properly. "Basically, you're drying out," Guralnik says.

Any healthy person can become dehydrated on hot days, when you've been exercising hard or when you have a disease or condition like diarrhea, in which you can lose a lot of fluid very quickly. But dehydration is generally more of a problem in the elderly, who can have a decreased sensitivity to thirst, and very young children who can't yet tell their parents when they're thirsty.

How much water does your body need? Guralnik says you have to consider the circumstances. "If you're active on a hot day, you need more water than if you're sitting in an air-conditioned office," he explains. An average person on an average day needs about 3 quarts of water a day. But if you're out in the hot sun, you'll need a lot more than that.

Signs of dehydration in adults are being thirsty, urinating less often than usual, having dark-colored urine, having dry skin, feeling tired or dizziness and fainting. Signs of dehydration in babies and young children



include a dry mouth and tongue, crying without tears, no wet diapers for 3 hours or more, a high fever and being unusually sleepy or drowsy.

If you suspect dehydration, drink small amounts of water over a period of time. Taking too much all at once can overload your stomach and make you throw up. For people exercising in the heat and losing a lot of minerals in sweat, sports drinks can be helpful. But avoid any drinks that have caffeine.

Remember: the best way to deal with dehydration is to prevent it. Make sure to drink enough water in situations where you might become dehydrated. For those caring for small children or older people with conditions that can lead to dehydration, Guralnik advises, "You need to prompt the person to drink fluids and remind them often. It's not just a one-time problem." ■



Wise Choices

Dehydration: What To Do

If you suspect someone is suffering from dehydration or a heat-related illness:

- Get the person out of the sun and into a cool place.
- Offer fluids like water, fruit and vegetable juices.
- Urge the person to lie down and rest.
- Encourage the person to shower, bathe or sponge off with cool water.
- Watch for heat stroke, which is especially dangerous and requires emergency medical attention. Look for a body temperature above 104° and symptoms such as confusion, combativeness, faintness, bizarre behavior, staggering, strong rapid pulse, dry flushed skin, lack of sweating or unconsciousness.



Web Links

For links to more about staying hydrated this summer, see this story online:

<http://newsinhealth.nih.gov/2009/July/feature2.htm>

Health Capsules

For links to more information about these topics, visit this page online:
<http://newsinhealth.nih.gov/2009/July/capsules.htm>

Well Water Testing Protects Kids' Health

If your water comes from a private well, be sure to get it tested at least once a year, especially if babies or children drink the water. A new report says that children can get sick from drinking contaminated well water.

About 1 in 6 households in the U.S. get their drinking water from private wells. With proper care, well water is extremely safe. But unlike public drinking water systems, which

have experts to check the water's safety, private wells are mainly the responsibility of the well owners.

NIH researchers took a lead role in working on the new report with the American Academy of Pediatrics. The report recommends that well owners test each year for **microbes** that can cause disease. Annual tests are also needed for nitrate, a molecule that comes from sewage or fertilizer. Nitrate poses special problems for infants less than 3 months old.

Families with wells need to keep in touch with state and local health experts to know what should be tested in their communities. To learn about well water in your area, visit www.epa.gov/safewater/privatewells/wherelive.html or call 1-800-426-4791. ■



Definitions

Microbes

Tiny germs—like bacteria and viruses—too small to see without a microscope.

What's Living on Your Skin?

Our skin is home to a much wider array of bacteria than previously thought, NIH scientists say.

The skin is one of the body's first lines of defense against sickness and injury. Its health depends on a delicate balance between our own cells and the millions of bacteria and other microbes that live on its surface. Researchers want to understand this balance so they can develop better ways to treat and prevent troubling skin diseases like eczema, psoriasis and acne.

To learn more about microbes on the skin, scientists took DNA from human skin samples and sequenced

a type of **gene** that's found only in bacteria. They analyzed more than 112,000 bacterial gene sequences.

The study uncovered new details about the many bacteria that live on different parts of the body. For example, the body area with the widest array of bacteria was the forearm, which had about 44 different species. The area behind the ear had only about 19 different species.

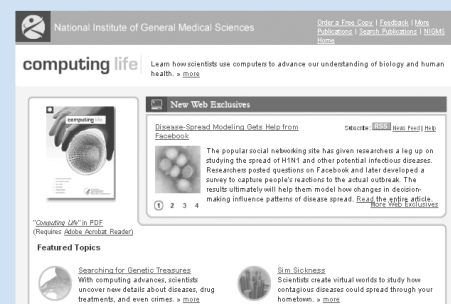
The scientists found that the bacteria on certain body parts are surprisingly similar on different people. So the bacteria that live under your arms are probably more similar to those living under other



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<http://publications.nigms.nih.gov/computinglife/>

Discover how scientists use computers to expand our understanding of biology and health. Check out the interviews with researchers, movies of biological processes (like blood clotting), quizzes and more.



people's arms than to the bacteria on your own forearm.

"Our results underscore that skin is home to vibrant communities of microbial life, which may significantly influence our health," says Dr. Elizabeth Grice, a scientist at NIH involved in the study. ■



Definitions

Gene

Segment of DNA that can help define characteristics like height and eye color and, in bacteria, size and shape.

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